

IN THE CLAIMS

1. **(currently amended)** A radio base station apparatus comprising:

a receiving section for receiving a signal from a terminal via a radio channel assigned to the terminal ~~by each IP layer~~;

an identifying section for identifying a particular radio base station which is to maintain the radio channel between the radio base station apparatus and the terminal during a process of a diversity handover for the terminal;

a network interface section for delivering the received signal to a network when a local station is not the particular radio base station; and

an inter-office interface section for delivering to the network a composite wave of the signal and a signal that is forwarded from a radio base station forming a wireless zone adjacent to a wireless zone formed by the local station, when the local station is the particular radio base station, the forwarded signal having arrived at the radio base station from the terminal via the radio channel.

2. **(currently amended)** A radio base station apparatus comprising:

a receiving section for receiving a signal from a terminal via a radio channel assigned to the terminal ~~by each IP layer~~;

an identifying section for identifying a particular radio base station which is to maintain the radio channel between the radio base station apparatus and the terminal during a process of a diversity handover for the terminal;

a network interface section for delivering the received signal to a network when a local station is not the particular radio base station; and

an inter-office interface section for forwarding the signal to the particular radio base station when the local station is not the particular radio base station.

3. (currently amended) A radio base station apparatus comprising:

a network interface section for capturing a signal that is delivered from a network in a physical layer of the network;

an identifying section for identifying a particular radio base station which is to maintain a radio channel assigned to a terminal ~~by each IP layer~~ as a receiving end of the signal during a process of a diversity handover for the terminal;

a transmitting section for transmitting the signal to the terminal via the radio channel; and

an inter-office interface section for forwarding the signal to a radio base station forming a wireless zone adjacent to a wireless zone formed by a local station, when the local station is the particular radio base station.

4. (currently amended) A radio base station apparatus comprising:

an inter-office interface section for capturing a signal whose destination is a terminal and that have been forwarded from a radio base station forming a wireless zone adjacent to a wireless zone formed by a local station;

an identifying section for identifying a particular radio base station which is to maintain a radio channel assigned to the terminal ~~by each IP layer~~ during a process of a diversity handover for the terminal; and

a transmitting section for transmitting the signal to the terminal via the radio channel when the local station is not the particular radio base station.

5. (original) The radio base station apparatus according to claim 1, further comprising an inter-office link securing section for securing a link according to a procedure of a channel control for assigning the radio channel to the terminal or through cooperation with a base station controller performing the channel control, the link being used for transfer of the signal between the radio base station apparatus and the radio base station, wherein

said inter-office interface section combines the received signal with a signal that is forwarded via the link secured by said inter-office link securing section.

6. (original) The radio base station apparatus according to claim 2, further comprising an inter-office link securing section for securing a link according to a procedure of a channel control for assigning the radio channel to the terminal or through cooperation with a base station controller performing the channel control, the link being used for transfer of the signal between the radio base station apparatus and the particular radio base station, wherein

said inter-office interface section forwards the signal to the particular radio base station via the link secured by said inter-office link securing section.

7. (original) The radio base station apparatus according to claim 3, further comprising an inter-office link securing section for securing a link according to a procedure of a channel control for assigning the radio channel to the terminal or through cooperation with a base station controller performing the channel control, the link being used for transfer of the signal between the radio base station apparatus and the radio base station, wherein

said inter-office interface section forwards the signal via the link secured by said inter-office link securing section.

8. (original) The radio base station apparatus according to claim 4, further comprising an inter-office link securing section for securing a link according to a procedure of a channel control for assigning the radio channel to the terminal or through cooperation with a base station controller performing the channel control, the link being used for transfer of the signal between the radio base station apparatus and the radio base station, wherein

said inter-office interface section captures a signal that is forwarded via the link secured by said inter-office link securing section.

9. (original) A base station controller comprising:

a channel controlling section for performing a channel control over a terminal in cooperation with a radio base station forming a wireless zone where the terminal can visit, and for determining a particular radio base station according to the channel control and all or part of configuration of the wireless zone, channel allocation, and frequency allocation, the particular

radio base station being to maintain a radio channel assigned to the terminal during a process of a diversity handover for the terminal; and

a network interface section for interfacing with a network under the channel control, the network being a network in which a communication channel is to be formed between said base station controller and the terminal via the radio base station.

10. (original) The base station controller according to claim 9, wherein said channel controlling section performs the channel control such that a radio base station is to be the particular radio base station, the radio base station forming a wireless zone in which the diversity handover is done in a suitable manner for all or part of configuration of a wireless zone, channel allocation, and frequency allocation.

11. (new) A radio communication method comprising the steps of:

maintaining identification information allotted to a radio terminal for receiving data without renewing the identification information when the radio terminal moves from an area of a first radio base station to an area of a second radio base station, and transmitting data from the second radio base station by using the identification information; and

renewing the identification information when the radio terminal moves to an area of a third base station, and transmitting data from the third radio base station by using the renewed identification information.

12. **(new)** The radio communication method according to claim 11, wherein said identification information is an IP address.

13. **(new)** The radio communication method according to claim 11, wherein said renewed identification information is different from the identification information before the renewal.

14. **(new)** The radio communication method according to claim 11, wherein said first radio base station sends primary information and said second radio base station sends secondary information, the primary information and the secondary information including same content information, and said radio terminal diversity-receives the primary information and the secondary information.

15. **(new)** A radio system performing radio communication with a radio terminal that is in communication with a first radio base station, comprising:

a second radio base station transmitting data by using identification information allotted to the radio terminal for receiving data from the first radio base station without renewing the identification information when the radio terminal moves from an area of the first radio base station to an area of the second radio base station; and

a third radio base station renewing the identification information when the radio terminal moves to an area of the third radio base station, and transmitting data by using the renewed identification information.

16. (new) A radio terminal performing radio communication with a radio base station, comprising:

a receiving section receiving data using identification information allotted from a first radio base station without renewing the identification information when the radio terminal moves to an area of a second radio base station after being allotted the identification information from the first radio base station, and renewing the identification information for receiving data when the radio terminal moves to an area of a third radio base station.